

WHAT IS CLAIMED IS:

- 1 1. In a network environment having a plurality of users each having a network-enabled
2 calendar, the improvement comprising:
3 a computer-implemented hook-up assistant (HUA) capable of
4 determining an appropriate time when at least two people will be available to
5 participate in an event or activity;
6 scheduling said event or activity at said appropriate time on respective
7 calendars of said at least two people; and
8 initiating said event or activity substantially at said appropriate time.
- 1 2. The improvement according to claim 1, wherein
2 said HUA comprises preferences and constraints of one of said at least two people;
3 and wherein
4 said appropriate time is determined consistent with said preferences and constraints.
- 1 3. The improvement according to claim 1, wherein
2 said HUA comprises
3 privileges to access and alter said respective calendars of said at least two
4 people, and
5 means for accessing and altering said respective calendars of said at least two
6 people according to said privileges.
- 1 4. The improvement according to claim 1, further comprising:
2 means for activating said HUA in response to a request from one of said at least two
3 people.

- 1 5. The improvement according to claim 4, wherein
2 said means for activating further comprises
3 means for interacting with said one of said at least two people; and
4 means for proposing said event or activity based on inputs obtained during
5 said interaction.
- 1 6. The improvement according to claim 4, wherein
2 said means for activating further comprises
3 means for interacting with said one of said at least two people to solicit yes or
4 no answers; and
5 means for proposing said event or activity based on said answers.
- 1 7. The improvement according to claim 1, further comprising:
2 means for activating said HUA in response to a request referring to a previous event
3 or activity with desired changes thereto.
- 1 8. The improvement according to claim 4 or 7, wherein
2 said request is in a form of spoken or manually entered natural language, in a form of
3 a computer language, or in a form of an electronic signal.
- 1 9. The improvement according to claim 1, further comprising:
2 automatically activating said HUA in response to an incomplete telephone call made
3 by a first of said at least two people to a second of said at least two people.
- 1 10. The improvement according to claim 9, wherein
2 said incomplete telephone call is indicated by a busy signal, an answering machine, a
3 voicemail service, a computerized agent, a human assistant, a receptionist, a secretary, an
4 inanimate entity, or an animate entity other than said second of said at least two people.

- 1 11. The improvement according to claim 1, wherein
2 said HUA comprises means for exchanging data related to said respective calendars
3 essentially regardless of physical and virtual boundaries that include distance, language,
4 platforms, operating systems, and network protocols.
- 1 12. The improvement according to claim 11, wherein
2 said means for exchanging data is capable of encoding a cross-domain structured
3 syntax language including hypertext markup language (HTML), eXtensible HTML
4 (XHTML), eXtensible markup language (XML), XML document type definition (DTD), and
5 XML schema.
- 1 13. The improvement according to claim 1, wherein
2 said HUA comprises means for assuring said at least two people be able to participate
3 in said event or activity at said appropriate time.
- 1 14. The improvement according to claim 13, wherein
2 said means for assuring comprises
3 means for determining whether said at least two people will have, at said
4 appropriate time, access to suitable communication means that will be available for
5 use in said event or activity; and
6 means for reminding said at least two people about said event or activity.
- 1 15. The improvement according to claim 14, wherein
2 said suitable communication means include wired and wireless communication
3 devices, resources, web-based services, cellular phones, telephones, video phones, Internet-
4 enabled phones, Internet-enabled input devices, instant messaging, virtual meeting places,
5 online chat rooms, online games, Multi-User Dungeons (MUDs), MUD Object Oriented sites
6 (MOOs), personal digital assistant (PDA), and World Wide Web Consortium (W3C)
7 compliant multimodal interaction means.

1 16. The improvement according to claim 1, wherein
2 said event or activity is a phone conversation, a business meeting, a family gathering,
3 or a social engagement.

1 17. The improvement according to claim 1, wherein
2 said HUA comprises means for securing reservations necessary to realize said event
3 or activity for said at least two people.

1 18. The improvement according to claim 1, wherein
2 said event or activity requires admission tickets, tokens, or permits; and wherein
3 said HUA comprises means for purchasing said admission tickets, tokens, or permits
4 for said at least two people to attend said event or activity.

1 19. The improvement according to claim 1, wherein
2 said event or activity requires invitations; and wherein
3 said HUA comprises means for obtaining invitations for said at least two people to
4 attend said event or activity.

1 20. The improvement according to claim 1, wherein
2 said appropriate time or said event or activity is found infeasible or otherwise
3 undesirable,
4 said HUA comprises means for proposing at least one alternative.

1 21. The improvement according to claim 1, wherein
2 said HUA is capable of proposing changes in prior commitments on said respective
3 calendars when a new request can only be desirably satisfied by impinging on said prior
4 commitments.

1 22. The improvement according to claim 21, wherein
2 said HUA is capable of altering said prior commitments in accordance with proper
3 privileges predetermined or obtained in real time.

- 1 23. The improvement according to claim 21 or 22, wherein
2 said HUA is enabled to determine independently how said prior commitments can be
3 altered; and wherein
4 said HUA automatically alters said prior commitments on said respective calendars to
5 satisfy said new request and promptly notifies those affected by said alteration.
- 1 24. The improvement according to claim 23, wherein
2 said alteration is selected from the group consisting of rescheduling said prior
3 commitments, replacing said prior commitments with alternatives, and a combination
4 thereof.
- 1 25. The improvement according to claim 1, further comprising:
2 means for activating said HUA, or invoking one or more functions thereof, in
3 response to a triggering mechanism selected from the group consisting of a tone, a button, a
4 key, a sound, a spoken word, a sequence of tones, a sequence of buttons, a sequence of keys,
5 a sequence of sounds, a sequence of spoken words, and a combination thereof.
- 1 26. The improvement according to claim 25, wherein
2 said HUA automatically contacts or automatically schedules to contact a person, an
3 agent of said person, or a HUA of said person to schedule a hook-up event to bring its user
4 and said person together.
- 1 27. The improvement according to claim 26, wherein
2 said contact is realized by phone, text message, voice message, or email.
- 1 28. The improvement according to claim 26, wherein
2 said schedules to contact is effected periodically until a certain criterion is satisfied.

- 1 29. The improvement according to claim 1, further comprising:
2 a computer product for implementing said HUA, the computer product comprising a
3 computer readable medium carrying computer-executable instructions implementing a
4 plurality of functions of said HUA.
- 1 30. The improvement according to claim 29, wherein
2 said computer product is embodied in a phone, a stand-alone network-enabled device,
3 a client, a server, or a combination thereof.
- 1 31. The improvement according to claim 29, wherein
2 said computer product is implemented as part of an instant messaging system.
- 1 32. In a distributed network environment having a plurality of users each of which may or
2 may not be assisted by an agent, the improvement comprising:
3 a computer-implemented hook-up assistant (HUA) capable of
4 receiving and accepting a plurality of hook-up requests;
5 scheduling a plurality of events to effect and fulfill each of said plurality of
6 hook-up requests, wherein said scheduling include, for a desired event,
7 determining an appropriate time for all parties involved to attend said desired
8 event; and
9 tentatively committing said all parties involved by indicating said desired
10 event at said appropriate time on calendars of said all parties involved.
- 1 33. The improvement according to claim 32, wherein
2 each of said plurality of hook-up requests is specified in terms of a series of people or
3 groups with whom interactions are separately desired.
- 1 34. The improvement according to claim 32, wherein
2 the sequence of said interactions correlates with the order of said series.

1 35. The improvement according to claim 32, wherein
2 said HUA comprises means for enabling a requesting user to minimize resources,
3 including time and expenses, associated with participating in all scheduled events on said
4 user's calendar.

1 36. The improvement according to claim 32, wherein
2 said HUA comprises
3 means for maintaining a federated calendar;
4 means for accessing and retrieving calendar data from a plurality of sources in
5 said distributed network environment; and
6 means for processing said calendar data to generate integrated views of said
7 federated calendar.

1 37. The improvement according to claim 36, wherein
2 said HUA further comprises
3 means for storing privileges, constraints, and preferences, wherein
4 said accessing and retrieving calendar data is effected in accordance with said
5 privileges, constraints, and preferences.

1 38. The improvement according to claim 36, wherein
2 said federated calendar contains
3 information about devices, resources, services, and at least one of said
4 plurality of users.

1 39. The improvement according to claim 32, wherein
2 said HUA is capable of
3 updating said calendars of said all parties involved, thereby committing said
4 all parties involved to attend said desired event at said appropriate time.

1 40. The improvement according to claim 32, wherein
2 said HUA comprises means for exchanging calendar information across physical and
3 virtual boundaries that include distance, language, platforms, operating systems, and network
4 protocols.

1 41. The improvement according to claim 40, wherein
2 said HUA further comprises means for encoding said calendar information written in
3 a cross-domain structured syntax language including hypertext markup language (HTML),
4 eXtensible HTML (XHTML), eXtensible markup language (XML), XML document type
5 definition (DTD), and XML schema.

1 42. The improvement according to claim 32, wherein
2 said HUA is capable of proposing at least one alternative when said appropriate time
3 or said desired event is found infeasible, inapplicable, or otherwise undesirable.

1 43. The improvement according to claim 32, wherein
2 said HUA is capable of proposing changes in prior commitments on said calendars of
3 said all parties involved when a new request can only be desirably satisfied by impinging on
4 said prior commitments.

1 44. The improvement according to claim 43, wherein
2 said HUA is capable of altering said prior commitments in accordance with proper
3 privileges predetermined or obtained in real time.

1 45. The improvement according to claim 43 or 44, wherein
2 said HUA is enabled to determine independently how said prior commitments can be
3 altered; and wherein
4 said HUA automatically alters said prior commitments on affected calendars to
5 satisfy said new request and promptly notifies those affected by said alteration.

- 1 46. The improvement according to claim 45, wherein
2 said alteration is selected from the group consisting of rescheduling said prior
3 commitments, replacing said prior commitments with alternatives, and a combination
4 thereof.
- 1 47. The improvement according to claim 32, further comprising:
2 a computer product for implementing said HUA, the computer product comprising a
3 computer-readable medium carrying computer-executable instructions implementing a
4 plurality of functions of said HUA.
- 1 48. The improvement according to claim 47, wherein
2 said computer product is embodied in a stand-alone network-enabled device, a client,
3 a server, or a combination thereof.
- 1 49. The improvement according to claim 47, wherein
2 said computer product is implemented as part of an instant messaging system.